

### ABSTRACT OF THE DISCLOSURE

An apparatus for imaging fluorescent particles has an imaging container having a lower section defining an interior space for containing fluorescent particles. The lower section of the imaging container has a side wall, a bottom wall and an exterior surface portion defining a first entry surface corresponding to the side wall for transmitting into the interior space an excitation beam of light and a second entry surface corresponding to the bottom wall for transmitting into the interior space an excitation beam of light. A light projecting device selectively projects an excitation beam of light onto the first entry surface of the imaging container to illuminate the fluorescent particles or onto the second entry surface of the imaging container to illuminate the fluorescent particles. An imaging device captures images of the illuminated fluorescent particles from the bottom wall of the imaging container.